

# Straight Talk from 3D CAD Users

Hear what designers are saying about Pro/ENGINEER®



"Considering the great modeling options, the user-friendly development, and management of assemblies and mechanisms – even of complex ones, I am every day more convinced that Pro/ENGINEER is the best tool for my job."

Fabio Carta has been working as naval designer for INSEAN in Rome, Italy, for about 10 years, and there he uses Pro/ENGINEER on a daily basis. Prior to joining INSEAN, he had never used any CAD system, and designed entirely on paper.

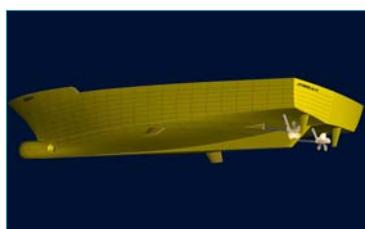
He recalls: "I learned to use Pro/ENGINEER by myself, following the instructions in the documentation provided with the software. In the beginning, I was using it only for generating CAM programs for the milling of hull models. However, in a short time I learned to model surfaces of hulls and marine screw propellers with good quality, and managed to carry out all my design tasks in Pro/ENGINEER with ease."



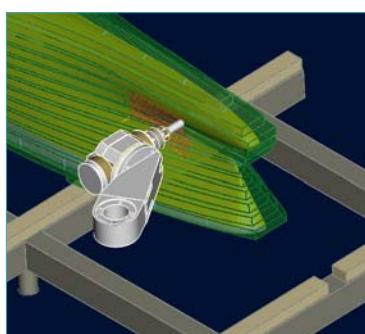
Fabio Carta, Naval Designer

Istituto Nazionale per Studi ed Esperienze di Architettura Navale (INSEAN), Rome, Italy

## Why Pro/ENGINEER is So Effective



Hull model, fit for self-propulsion tests.



Local toolpath simulation for a wooden hull model.

"I use Pro/ENGINEER for the design of physical scale models, mainly of hulls and marine screw propellers, and the development of measuring equipment used at our institute to measure motion resistance, sea-keeping, stability, and maneuverability.

In Pro/ENGINEER, I value the ability to quickly model parts or assemblies as if I were creating them with machine tools – organizing the different features in the model tree in the same order I would put them in the working sheet. This allows me to schedule machining operations, reducing them to a minimum or even eliminating the unnecessary ones.

By using the modeling capabilities and the functions of the Pro/ENGINEER Advanced Assembly Extension (AAX), I can develop complete, mathematically correct models of all components, measuring tools and fixing equipment. This allows me to machine the physical models with numerical control processing (CNC), minimizing manual finishing operations and the time necessary to set up the program for the required tests.

The models that we test in our plants are essentially unique prototypes. We are rarely allowed the luxury of creating a second improved version of them. It is therefore necessary that the model fully meets the design technical specifications and provides specific features, depending on its functional use. With Pro/ENGINEER, we can create accurate designs up front, allowing us to foresee all possible issues that might arise both during the construction stage and especially while carrying out the test measurements."